

### REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-19 are presently active, Claims 1-18 are amended, and Claim 19 is added by the present amendment.<sup>1</sup> No new matter is added.

In the outstanding Office Action, the title of the specification was objected to for not descriptive. Claims 1-18 were rejected under 35 U.S.C. § 112, second paragraph, as indefinite. The specification was objected to because of informalities. Claims 1, 3-9 and 11-18 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting over Claims 4-6, 9-13 and 21-32 of copending U.S. Application No. 10/387,483 in view of Duprey et al. (US 6,887,614). Claims 2 and 10 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting over Claims 4-6, 9-13 and 21-32 of copending U.S. Application No. 10/387,483 in view of Duprey et al., and further in view of Schumm (US 4,469,764).

Regarding the objection to the title of the specification, the title is amended to be descriptive.

Regarding the 35 U.S.C. § 112, second paragraph, rejection of Claims 1-18, Claims 1-18 are amended to recite "organic polymer sheet." No new matter is added.<sup>2</sup> It is noted that the organic polymer sheet has hydrogen gas permeability.<sup>3</sup> As a reference, Applicants provide a copy of "Chemical Equipment Handbook, 2nd Edition, Maruzen Kabushiki Kaisha (April 5, 1996), 2 printings" and an English translation of Table 17·33 on page 711 of this Handbook. In Table 17·33, the gas permeability coefficients of polymer films are set forth.

---

<sup>1</sup> See, for example, the tables 1 and 3 in the specification.

<sup>2</sup> See, for example, the specification at page 43, lines 14-24, and at page 44, line 1 through page 47, line 23.

<sup>3</sup> See, for example, the specification at page 49, line 4 through page 50, line 7.

Table 17·33 shows that polymer films having He gas permeability also have hydrogen gas permeability. Thus, Claim 1 is now definite.

Further, Claim 1 recites, *inter alia*, “a He gas permeability at 30°C in a range of  $2 \times 10^{-6}$  to  $10000 \times 10^{-6}$  (cm<sup>3</sup> (STP) cm/sec·cm<sup>2</sup>·cmHg).” The value of the He gas permeability recited in Claim 1 is measured at 30°C. The value of the He gas permeated through the organic polymer sheet at 30°C is converted to a volume value measured at the standard temperature and pressure (STP), namely, at 0°C and 1atm. Therefore, in Claim 1, “cm<sup>3</sup>” is followed by (STP). Thus, it is respectfully submitted that Claim 1 is not indefinite even if both of the terms “at 30°C” and “STP” are recited in Claim 1.

Further, the terms “electrolysis solution” in Claims 1, 9 and 17 are amended to “electrolytic solution,” as suggested by the outstanding Office Action.

Thus, it is respectfully submitted that the 35 U.S.C. § 112, second paragraph, rejection is overcome.

Regarding the objection to the specification, the terms “electrolysis solution” in the specification are amended to “electrolytic solution,” as suggested in the outstanding Office Action. However, the terms “He gas permeability” in the specification are not amended because of the reasons stated above. Thus, it is respectfully submitted that the objection to the specification is overcome.

Finally, regarding the provisional double-patenting rejection, Applicants submit that a terminal disclaimer can be filed, if the claims in the present application and the claims in the co-pending Application No. 10/387,483 remain obvious in view of each other at the time of allowance of either of these applications. Indeed, M.P.E.P. § 804.02 IV states that, prior to issuance, it is necessary to disclaim each one of the double patenting references applied. Hence, Applicants respectfully request that the examiner contact the undersigned should the

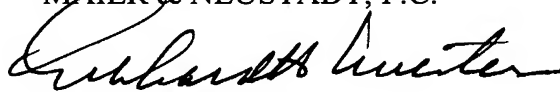
present arguments be accepted and should the case be otherwise in a condition for allowance.

At that time, a terminal disclaimer can be supplied to expedite issuance of this case.

Consequently, in view of the present amendment and in light of the above discussions, it is believed that the outstanding rejection is overcome, and the application as amended herewith is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



---

Eckhard H. Kuesters  
Attorney of Record  
Registration No. 28,870

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 06/04)

EHK\TY:pta  
I:\ATTY\TYAMEND-RESPONSES\247112\247112 AM DUE NOV 30 2006.DOC

**Best Available Copy**

Table 17.33 Permeability Coefficient [ $\text{atm}\cdot\text{cm}^3\cdot\text{cm}/\text{cm}^2\cdot\text{s}\cdot\text{atm}$ ]

	$\text{N}_2$	$\text{O}_2$	$\text{H}_2$	He	Ar
butyl rubber	-	-	$4.5 \times 10^{-8}$	-	-
Hypalon GR-S	$1.6 \times 10^{-8}$	-	-	-	-
Neoprene CS-2367	$6.8 \times 10^{-9}$	$2.3 \times 10^{-8}$	$1.1 \times 10^{-7}$	$7.5 \times 10^{-8}$	$2.1 \times 10^{-8}$
Neoprene CS-2368B	$1.9 \times 10^{-9}$	$1.4 \times 10^{-8}$	$7.5 \times 10^{-8}$	$7.2 \times 10^{-8}$	$1.2 \times 10^{-8}$
Niigon	$5.2 \times 10^{-9}$	$1.8 \times 10^{-8}$	$2.1 \times 10^{-7}$	$9 \times 10^{-8}$	$2 \times 10^{-8}$
Nylon 31	-	-	$1.2 \times 10^{-9}$	$5 \times 10^{-9}$	-
Nylon 51	-	-	$4.7 \times 10^{-9}$	$8.2 \times 10^{-9}$	-
Perbunan PB60	-	$6 \times 10^{-9}$	$7.5 \times 10^{-8}$	$7.5 \times 10^{-8}$	$1.3 \times 10^{-8}$
PERSPEX	-	-	$2.5 \times 10^{-8}$	$5.3 \times 10^{-8}$	-
polystyrene	-	$8.4 \times 10^{-9}$	$1.2 \times 10^{-7}$	$1.4 \times 10^{-7}$	-
polyethylene	$9 \times 10^{-9}$	$2.7 \times 10^{-8}$	$7.5 \times 10^{-8}$	$5.3 \times 10^{-8}$	$2.5 \times 10^{-8}$
polyvinyltoluene	-	$5.8 \times 10^{-9}$	$1.5 \times 10^{-7}$	$1.4 \times 10^{-7}$	-
PTFE	$2.3 \times 10^{-8}$	$7.5 \times 10^{-8}$	$1.8 \times 10^{-7}$	$5.3 \times 10^{-6}$	$4.4 \times 10^{-8}$
Natural rubber 337	$5.3 \times 10^{-8}$	$2 \times 10^{-7}$	$3.4 \times 10^{-7}$	$2.2 \times 10^{-6}$	$1.5 \times 10^{-7}$
Silicon rubber 80(hardness)	$2.7 \times 10^{-6}$	$5 \times 10^{-6}$	$9.5 \times 10^{-6}$	$2.9 \times 10^{-6}$	$5.3 \times 10^{-6}$
Thiokol	-	-	$3 \times 10^{-8}$	-	-
Viton A	-	-	$3.5 \times 10^{-8}$	$7.5 \times 10^{-8}$	-

Best Available Copy



改訂二版 化学装置便覧

平成元年 3 月 30 日 発 行  
平成 8 年 4 月 5 日 第 2 刷発行

編 者 社団法人 化学工学会

発行者 鈴木 信 夫  
出版事業部 深山 恒雄

発行所 丸 善 株 式 会 社 東京・日本橋

出版事業部 〒113 東京都文京区本郷二丁目 38 番 3 号  
編集部 電話(03)5684-5081 / FAX(03)5684-2458  
営業部 電話(03)5684-5571 / FAX(03)5684-2456  
郵便振替口座 00170-5-5

© 社団法人 化学工学会, 1989

組版・株式会社そうご / 印刷・株式会社風雲堂  
製本・株式会社松岳社

ISBN 4-621-03346-8 C3058

Printed in Japan

Rest Available Copy